AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1   (Previously presented)   A concentrator for voice telephones installed in a local area network comprising a local area network switching unit for switching and connecting a plurality of interfaces, and a plurality of local area network hubs accommodating equipment connected to the local area network switching unit via the interfaces, respectively, and for performing data communication over the local area network, said concentrator comprising:

a local area network interface connected to the local area network switching unit;

and

at least one set of voice telephone interfaces connected to the at least one voice telephone, wherein digital or analog voice data transmitted and received by the at least one set of the telephone interfaces are converted into media access control frames or internet protocol packets, and the digital or analog voice data converted into the media access control frames or internet protocol packets are relayed to the local area network interface.

Claim 2   (Previously presented)   A concentrator for voice telephones according to Claim 1, further comprising:

a central processing unit; and

a second local area network interface for performing transmission and reception of data between the central processing unit and one of the local area network hubs.

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Claim 3   (Currently Amended) A concentrator for voice telephone according to Claim 1,

wherein signals from circuits of analog telephone ~~networks~~ network subscribers are converted into

call control protocols according to transmission control protocol – internet protocol so as to be able

to accommodate the analog telephone subscribers' terminals.

Claim 4   (Previously presented)   A concentrator for voice telephone according to Claim

1, further comprising:

        a central processing unit; and

        a second local area network interface for performing transmission and reception of data with

the central processing unit and wherein the digital or analog voice data received from the at least

one voice telephone is converted into transmission control protocol – internet protocol packets or

user datagram protocol – internet protocol packets, and the transmission control protocol – internet

protocol packets or user datagram protocol – internet protocol packets are transmitted and received

via the second local area network interface.

Claim 5   (Previously presented)   A concentrator for voice telephones according to Claim

4, further comprising a router connected to the second local area network interface for connecting

the second local area network interface to either the outside of the local area network or the local

area network hubs.

Claim 6.   (Currently Amended) A method of communication over a local area network

comprising a plurality of local area network hubs coupled to computing equipment for performing

data communication, a plurality of concentrators coupled to voice telephones, and a local area

network switching unit, having a plurality of ports and for switching and connecting between the

plurality of the local area network hubs, and the plurality of the concentrators for voice telephones,

the method comprising the step of:

performing call control for the voice telephones coupled to each of the concentrators with

the computing equipment in each of the local area network hubs wherein the case that a response

from a PC or work station on the call-in side is not obtained, arrival of a call request is notified, and

the response is detected by use of control channel signals of a voice telephone interface on the call-

in side; and applying a frame having a function of absorbing fluctuation in an arrival time of

packetized voice data of the voice telephones.

Claims 7-9 (canceled)

Claim 10   (Currently amended) A telecommunication apparatus for voice telephones installed

in a local area network including a plurality of local area network equipment, the

telecommunication apparatus comprising:

at least one local area network interface coupled to the local area network equipment;

a central processing unit;

a set of voice telephone interfaces adapted to receive and transmit digital and analog voice

data or call control data between the central processing unit and at least one voice telephone,

wherein the central processing unit is adapted to convert the digital and analog voice data or call

control data into internet protocol packets or media access control frames and apply a frame having

<u>a function of absorbing fluctuation in an arrival time of the voice data to a data block of the internet</u>

<u>protocol packet or media access control frame</u> and transmit the internet protocol packets or media

access control frames to the at least one local area network interface wherein the set of voice

telephone interfaces are adapted to perform a BORSCHT function.

Claim 11   (Previously presented)   The telecommunications apparatus of claim 10, further

comprising a router connected to at least one local area network interface and to a local area

network hub or outside of the local area network.

Claim 12   (Previously presented)   The telecommunications apparatus of claim 10,

wherein the local area network equipment includes one of a local area network hub and a local area

network switching unit.

Claim 13   (Previously presented)   The telecommunications apparatus of claim 10, further

comprising a LANC circuit coupled to the central processing unit and voice telephone interface for

assembling and disassembling a media access control frame.

Claim 14   (Previously presented)   The telecommunications apparatus of claim 10,

wherein the call control data are converted into a call control protocol according to transmission

control protocol/internet protocol.

Claim 15   (Currently amended) A telecommunication apparatus for voice telephones installed

in a local area network including a plurality of local area network equipment, the

telecommunication apparatus comprising:

at least one local area network interface coupled to the local area network equipment;

a central processing unit;

a set of voice telephone interfaces ~~adapted~~ to receive and transmit at least one of digital

voice data, ~~and~~ analog voice data or call control data between the central processing unit and at least

one voice telephone, wherein the central processing unit ~~is adapted to convert~~ converts the at least

one of digital voice data, ~~the digital and~~ analog voice data or call control data into transmission

control protocol/internet protocol packets or user datagram protocol~~/internet protocol~~ packets and

transmit the packets to the at least one local area network interface.

Claim 16   (Previously presented)   The telecommunications apparatus of claim 15, further

comprising a router connected to the at least one local area network interface and to a local area

network hub.

Claim 17   (Previously presented)   The telecommunications apparatus of claim 15, further

comprising a router connected to the at least one local area network interface and to an external

network.

Claim 18   (Previously presented)   A method of communication over a local area network,

comprising:

receiving and transmitting digital voice data, and analog voice data or call control data

between a voice telephone interface and a voice telephone;

receiving and transmitting the digital voice data, and analog voice data or call control data

between the voice telephone interface and a central processing unit;

converting the digital voice data, and analog voice data or call control data into internet

protocol packets or media access control frames with the central processing unit; and

transmitting the internet protocol packets or media access control frames from the central

processing unit to a local area network interface.

Claim 19   (Previously presented)   The method of claim 18, further comprising

transmitting the internet protocol packets or media access control frames from the local area

network interface to a router.

Claim 20   (Previously presented)   The method of claim 19, further comprising

transmitting the internet protocol packets or media access control frames from the router to an

external network.

Claim 21   (Previously presented)   The method of claim 18, further comprising

transmitting the internet protocol packets or media access control frames to a local area network

hub.

Claim 22   (Previously presented)   The method of claim 18, further comprising converting

the digital and analog voice data into transmission control protocol/internet protocol packets or user

datagram protocol/internet protocol packets with the central processing unit.

Claim 23   (Previously presented)   A concentrator for voice telephones according to Claim

1, further comprising:

       a database coupled to the local area network switching unit or the local area network hubs

and storing media access control addresses for clients of the local area network and providing the

addresses in response to inquires.

Claim 24   (Previously presented) The method of claim 18, wherein time slots for the digital and

analog voice data or call control data are converted into the internet protocol packets or media

access control frames.

Claim 25   (New) A concentrator for telephones according to claim 1, wherein the digital or

analog voice data converted into media access control frames or internet protocol packets are

applied with a frame for absorbing fluctuation in their arrival time.

Claim 26   (New) The telecommunication apparatus of claim 15, wherein the central processing

unit applies a frame for absorbing fluctuation in an arrival time of the transmission control

protocol/internet protocol packets or user datagram protocol/internet protocol packets.

Claim 27   (New) The method of claim 18, further comprising applying a frame having a

function of absorbing fluctuation in an arrival time of the internet protocol packets or media access

control to a data block of the MAC frame.